ABSTRACT OF THE DISCLOSURE

A network routing apparatus in which packet forwarding units for performing a packet forwarding process are arranged in parallel to one another, a packet distribution unit for distributing packets to the packet forwarding units arranged in parallel to one another, a packet rearrangement unit for rearranging outputs of the packet forwarding units are provided in the network routing apparatus, and packet retrieving units for retrieving packet headers in the packet forwarding units are further arranged in parallel to one another.